DOCUMENT RESUME

ED 157 602 PS 009 872

AUTHOR Shields, M. M.
TITLE Some Communicational Skills of Young Children: A Study of Dialogue in the Nursery School.
PUB DATE Jun 76
NOTE 24p.; Paper presented at the Psychology of Language Conference (Stirling, England, June 1976) ; Not available in hard copy due to marginal legibility of original

EDRS PRICE MF-$0.83 Plus Postage. HC Not Available from EDRS.
DESCRIPTORS *Communication Skills; Group Behavior; Group Relations; *Interaction Process Analysis; *Interpersonal Competence; *Language Development; Language Research; Linguistic Competence; Nursery Schools; *Preschool Children; Preschool Education; Research; *Speech Communication; Verbal Communication

ABSTRACT

This paper examines some of the conversational skills manifested by children within a nursery group as they organize their own activities among themselves and cope with social and didactic demands of adults. Among the features examined are the number of active and passive participants within conversing groups, the intentions and pragmatic knowledge of the participating speakers, their ability to use shared procedures and structural features of language to get their meaning across, and their ability to play a variety of roles as initiators and respondents, as information givers and information seekers, as action initiators and collaborators, and as role claimants and role assigners. Attention is also paid to whether remarks are addressed dyadically or to more than one person collectively and to the fitting or remarks of alternating speakers one with another within conversational texts, by reaction markers and acknowledgements such as yes and no, by elliptical abbreviation, and by response elicitors such as questions and tags. The psychological implications of the process of maintaining a joint field of reference and shifting attention within and between fields of reference is explored and a model of the interlacing of interpersonal and contextual meaning is considered. (Author/CM)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

From: RECENT ADVANCES IN THE PSYCHOLOGY OF LANGUAGE
Edited by Robin N. Campbell and Philip T. Smith
(Plenum Publishing Corporation, 1978)

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

ED157602

SOME COMMUNICATIONAL SKILLS OF YOUNG CHILDREN - A STUDY OF DIALOGUE IN THE NURSERY SCHOOL

M. M. SHIELDS

INSTITUTE OF EDUCATION, UNIVERSITY OF LONDON

INTRODUCTION

This paper is not concerned with language as a self-sufficient system, but with language as a tool - a means whereby one human mind can contact another and enlarge and enrich itself by experience filtered through another awareness and thoughts generated by another intelligence. It is therefore focussed on the encoding and decoding of messages, a process in which the construction and comprehension of linguistic strings is only a part.

In ordinary life people speak to each other within a context which consists not only of a material environment which both of them can perceive, but also of an elaborate social world represented in the mind of each in a web of constructs and rules reflecting their individual pathways through it, a web which is constantly changing as the social process brings persons together in a series of interactive and communicative relationships. Some communications are extremely brief, but many also consist of longer turntaking dialogues in which meanings are exchanged between two or more persons, and negotiated with greater or lesser skill through their misunderstandings, and their individual susceptibilities. Conducting a communicative dialogue is a complicated procedure which requires skills beyond those of linguistic competence - skills which include a grasp of human behaviour as well as a knowledge of the objective world, a pragmatics as well as a semantics and a syntax.

PS 009872

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Maureen Shields

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC) AND USERS OF THE ERIC SYSTEM."

The term 'communicational skill' which appears in the title is chosen with the intention of highlighting the process, rather than the product. The analysis of discourse as currently practised is nearly always focussed on a text-as-uttered rather than on the interpersonal construction of texts, on form rather than formulation, but in looking at the development of dialogue skills, it is the emergence of competence that is of most importance. We cannot define these competences however, without a close examination of what is involved in the processes of communicative interaction.

If language is to be considered within its interpersonal and social context, we must take note of the features which distinguish encounters with persons from encounters with things. Things may undergo the effects of our activities but they do not initiate activities or represent them to themselves, while the peculiar feature of social encounters, whether linguistic or not, is that they are represented in the consciousness of each individual involved. Each must take account of the fact that the other can register his words and actions and put an interpretation on them (Heider 1958; Taguiri 1958). Mature communicators will have learned that the interpretations and reactions of others have their origin in independently existing and autonomous individuals and that each of these has his own pathway through a shared, but not wholly shared, material and social world. It is the autonomy and distinctness of individuals, their separate histories in time, the differences in the experiences which have shaped their awareness that makes the passage of information between one mind and another a possibility. If the contents of all minds were identical, communication would be not only unnecessary, but impossible. If no experience was shared, however, if there were no common field of perception, no common emotions, no common schemes of activity, no common experiences of family and other parts of the social network, communication would also be impossible. Communication depends both on what is common and what is distinct in human experience. This state of affairs is reflected in the basic structure of language in the distinction between what is old and what is new, what is presupposed and what is predicated, what is picked out as theme, and what is said in rhyme. The common or presupposed constitutes a field across which differentiated messages can pass.

The child's apprenticeship to dialogue

If this is so, then the first developmental task for the neophyte human communicator is to construct an interpersonal relationship which can gradually accommodate a shared world of persons, things and environments. Although this is here specified as a task for the baby, many studies of the early mother-child relationship reveal very tellingly, that the mother or caretaker takes the burden of inducting the baby into this interpersonal world of meaning in a relationship which is highly asymmetrical. (Bruner 1975; Snow 1975; Trevarthen 1975.) What these studies clearly show is that reciprocal activities between the child and its caretaker in which each monitors and responds to the behaviour of the other are well established before the first identifiable words appear. These proto-dialogues have some of the characteristics of later dialogues in so far as there is usually an initiating move by one of the participants to set up a joint field of attention and activity, there are moves to maintain and prolong the interchange, and there is turntaking. Although this turntaking is initally asymmetrical, as the mother often takes both roles, by interpreting the baby's behaviour as having meaning, the baby soon begins to reciprocate and even takes an initiating role in some of the interchanges.

Both Bates (1975) and Mueller (1975) remark that the children they observed seemed to segregate their object-oriented behaviours from their person-oriented behaviours in their spontaneous activity, and Bates argues that it is at the stage the child can co-ordinate an object-oriented behaviour and a person-oriented behaviour by using an object to attract a person that we get the emergence of what she calls proto-declaratives linked to a shared field of reference. Pointing behaviour appears to emerge at this stage too. (Bruner 1977). The implication of these studies is that the interpersonal aspect of communication is established and expressed in activity to secure response from the other, before the child manifests in his own self-initiated activity that he realises that the adult can also be made aware of the particulars which he himself picks out of the environment. Further evidence is needed, however. The second year of life with its constant demand for specification and naming seems to be the foundation period for the realisation that the environment and objects in it can be and usually are perceptually shared. The establishment of this shared

field and its interlocking with the interpersonal reciprocity established in the child's human relationships is the basis for the development of communication skills. In the initial stages simply sharing a field is excitement enough. It is by now well established that early utterances exhibit a very large amount of imitative and echoic verbalisation in which the child picks up and feeds back parts of preceding adult utterances, often items which are prominent in the field of reference, or other words and phrases usually marked with tonic stress. There may also be memorised chunks from well organised and frequent responses he has previously heard, (Ryan 1974; Keenan 1975; McTear 1976; Clark 1976). Such utterances cohere in the joint context of activity and Shugar (1975) has analysed their linkages with both context of reference and context of adjacent text. These apparently imitative sequences may therefore provide an exercise in thematic cohesion which is one of the important features of dialogue. After all, learning to share the same perceptions, share the same object, share the same environment and share the same verbal indices is as fundamental to communication as learning to differentiate viewpoints and intentions. In our intellectual obsession with exchanging new information we should not forget the fact, pointed out by Malinowski many years ago, that a great deal of human language is probably concerned with establishing and exchanging commonalities of meaning. (Malinowski 1923.) As far as the young child is concerned talking may initially be like walking, a step in becoming more like an adult. The negotiation of differing meanings may arise only at points of mismatch in attention or cross-purposes in intention, and the main purpose of talk may simply be to keep one's own activities in the eye of the other, to maintain an inter-subjective field.

Not all verbalisations by children are parts of a dialogue, many are simply embedded in action. In a nursery class or school, however, the children are inevitably thrown into a social situation where their activities are at the minimum in a mutually shared perceptual field, and very frequently take place in groups sharing a joint activity. All the recordings considered here were made in nursery schools and there are no true monologues in which there was no audience. There are, however, monologue episodes interlaced with exchanges and many extended turns within interactions.

What is dialogue?

When is a dialogue a dialogue? First there are the features that distinguish it from monologue, (a) presence of an audience which is minimally respondent, and (b) turntaking. But although turntaking is a basic feature of dialogue, it is clearly not sufficient that the speakers should take turns, there has also to be some cohesion between the remarks so that each one is in some way dependent on what went before, and forms a link with what comes after which is indicated either by continuity of theme or by structural continuity of some sort. Children may maintain continuity of theme in vocalisations accompanying an activity simply because the activity itself acts as a skeleton for the language. Two children playing together may each have continuity of theme in their utterances, but their utterances need not form a dialogue unless there is some dependency of meaning or structure between them. Piaget noticed the phenomenon of what he termed collective monologue in his earliest work on language. He noted that it was socially directed but that the remarks did not mesh in with those made by another. Perhaps Piaget underestimated the skill involved in simply maintaining an intersubjective field across which it may be possible to convey differentiated meaning from time to time, and probably the very loosely linked verbalisations of collective monologue may be directed rather at keeping the field alive by minimal indications of what you are doing at your end of it, expecting nothing more than that the other participant will do the same. (Piaget 1959).

It appears then, that two distinguishing groups of features pick out dialogue, and these are (a) interpersonal participation, turntaking and cohesion between speakers, and (b) thematic and contextual cohesion. Both are matters of degree and neither is a unitary phenomenon. The marks of interpersonal cohesion which can be picked out on the surface structure of dialogue, such as greetings, summonses, turntaking, discourse deixis, acknowledgements and modulation, arise out of the understanding of the speakers of each other's potential for participation. Part of this is structured by some conception, however elementary, that the perceptual and interactional field is shared, that previous experience can be remembered and brought into play and there is some agreement on what is here called the latent context which frames the situation, from

which rules for coherent behaviour in a given context are derived and within which options for action are chosen. This latent context consists of a series of embedded frames and includes the more diffuse socially derived rules of what behaviour goes with what in a given context, and how certain roles are played, and also very specific rules pertaining to the framework of the immediate setting, in this case the nursery, and the rules and customs concerning the roles and activities of its members. Analysing the latent context would require a paper on its own even to scrape the surface and here it will remain unanalysed except to say that as it expresses what the child brings with him into the immediate context of activity, it is the source of most of the interest and variation in verbal behaviour. Furthermore it is not all shared or agreed because it is coloured by the past history of individuals and is therefore a frequent source of misunderstanding, conflict and argument.

Six sources for the marks of cohesion which are carried on the surface of language are set out on the table below. Each is associated with a set of rule systems which govern communicative competence and each of these is in turn founded on a basically cognitive system of beliefs and representations. There are six headings which pick out different aspects of interpersonal communicative skill, three mainly concerned with maintaining the interpersonal level, and three which are concerned with the context. These headings are designed to draw attention to different aspects of a complex skill and are not intended to form a constructed model. Separating them in this way serves to draw attention to the multiplicity of function of many linguistic devices. It is a fundamental feature of human languages that their richness and variety are produced by multiple levels of meanings and functions mapped onto a relatively limited set of surface features.

The first heading (a) <u>interpersonal field induction and maintenance</u> covers those devices which serve to bring an interpersonal field into being, and maintain it in being. It will include summons and address, turntaking, discourse deixis which defines who is speaking and who is spoken to, acknowledgements, cohesive tagging, modulation and conjunction. Next comes (b) <u>interpersonal field organisation</u> which will include all those devices which organise the field of reference around the speaking pair. These will include, besides specific reference, field deixis, which locates the object of

Table 1

Elements of Discourse Cohesion

	Interpersonal cohesion			Contextual cohesion		
	a) Interpersonal field induction & maintenance	b) Interpersonal field organisation	c) Functional cohesion	d) Cohesion of context of activity	e) Cohesion of expressed linguistic context	f) Cohesion of latent context
Level of Linguistic System	Summons, address, turntaking, discourse deixis, yes & no, acknowledgement, tagging, modulation, conjunction, etc.	References, pronominalisations, ari field deixis, temporal deixis, definiteness, etc.	Questions, Answers, Affirmations, Denials, Commands, Requests, Consents, Suggestions, etc.	Reference case marking, pronominalisation, modality, marking for time and space. Transitivity.	Thematisation, definiteness, conjunctions	Rules of discourse relevance, means for evoking latent shared context
Level of Communication skill	Grasp of linguistic means for attracting attention, maintaining a communicational field, and for adjusting language to the autonomy and status of others	Grasp of linguistic means for referring to things or events and locating them in time and space	Grasp of linguistic rules for the construction of speech acts	Grasp of the relations of language system to the meaning derived from contexts	Grasp of means to maintain thematic continuity, and to foreground topics in the intersubjective field	Pragmatic rules about presuppositions governing appropriate utterances in given contexts
Level of Representation or Recognition	Belief about a) the autonomy b) the approachability c) the social competence d) the relative status of others (sex, age, power, control of resources).	Beliefs about the perceptions experiences and cognitions of others. Beliefs about their memory and attentional field.	Representations of the intentions and activities of self and other persons within a context. Expectations concerning the effects of actions and verbalisations on others.	Representations of the framework of current activities.	Representations of the meanings of the utterances of previous speakers.	Beliefs about what is the case in the material and social world and the rules governing actions in particular contexts.

attention in relation to the speakers and time deixis which organises time reference from the point of utterance. The third set under the heading (c) functional cohesion are those linguistic rules which associate speech acts one with another, i.e. questions with answers, affirmations with denials, requests with consents, pleas with concessions and so on. (d) the context of activity supplies the immediate feed into the shared semantics, and controls reference, case marking, transitivity, modality and marking for time and space. There is an overlap between this and (b) interpersonal field organisation which is inevitable in view of the fact that reality is mirrored twice by the minds of the participants, once directly and once by the beliefs of each about the awareness of the others. Lastly, (f) designates the latent context which speakers bring with them into their communicative interaction. It carries both shared representations and rules, and differentiated experiences, rules and values dependent on the different pathways of the participants through the material and social world before the moment of encounter.

Participation and turntaking in dialogue in the nursery school

Some of the early stages whereby children begin to acquire these complex skills are mapped in other studies. The data presented here is drawn from a corpus collected in 1970-72 and is concerned with children of three to five years who are already showing quite sophisticated skills. The recordings were undertaken with a view to inaugurating an experimental intervention programme on the basis of some knowledge of children's actual performances, and were recorded between 1970 and 1972, and sorted by the then very respectable method of sifting out the constructed utterances, that is those organised round a finite verb phrase, and classifying these by grammatical structure. The warning bell began to ring when the index files containing the fragments, the one word answers, the Yes/No responses, the verbless ellipses, the vocatives and summoners such as proper names, the ohs, the ahs, the wells, the ehs? and the whats? began to fill and multiply and it became obvious that they constituted nearly a quarter of the recorded utterances. Moreover, many of these were also attached to constructed utterances, so they were clearly a major feature in language performance . The question then arose of whether they were also part of language competency, and if so, what sort of competency was this?

Using that classical analytic device, the native language speaker's intuition, we were driven away from a grammatical focus and towards considering the interpersonal contruction of texts, and suddenly all these little bits and pieces began to fall into place as features of an immensely complex communication skill; indeed they are the source of the analysis in Table (1).

First let us turn to the simpler side of the problem, interpersonal participation and turntaking, and ask to what extent the children actually communicated in groups. Turntaking is linked to address, and address is one of the things which was recorded for each exchange in our sample using combined cues, such as gaze, bodily orientation, and the direction of response. Of the 6,730 recorded utterances, 12% were not classifiable by address, 21% were addressed within a specific group, and 67% to specific individuals. Typically, the dialogue of groups of children engaged in a similar task or occupation tended to resolve into an interlocking series of dyadic interactions whereas children who were engaged in freely chosen play, tended to interact more as a group as they played out reciprocal or parallel roles. Where there was an adult in charge of the interaction sequence, she usually played a highly organising function in distributing the interactional turns. The effect of this can be seen from the following diagrams.

Diagram 1 Network of address in remarks of a group of children playing round a table with farm animals. There are 6 collectively addressed remarks and 2 reflexive. No participating adult.

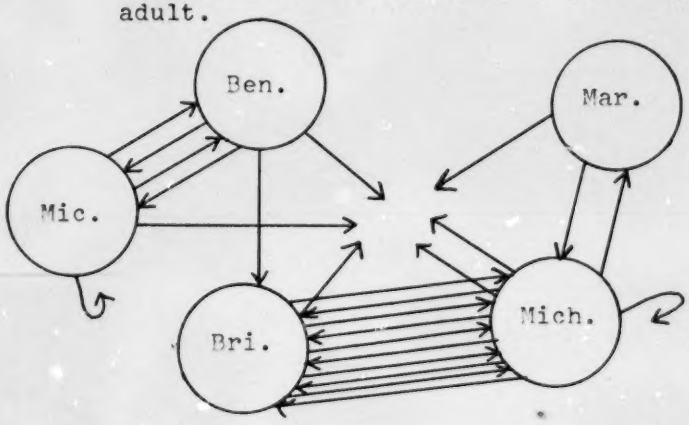
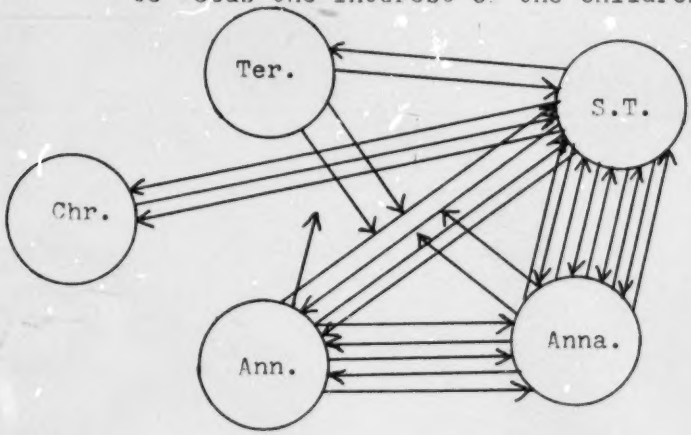


Diagram 2 Network of address in first 31 remarks of interaction concerning shells brought by student teacher (S.T.) who is attempting to focus the interest of the children.



Holding a general conversation with more than two people participating is a slowly acquired art, and the children in this set of recordings, even taking the broadest criteria for defining a dialogue, who stayed together in a specific context of activity without an adult present, tended to interact in pairs.

Table 2 Numbers in verbally interacting groups

No. in group	2	3	4	5+
Adult present	37%	51%	4%	6%
Children only	78%	12%	6%	5%

The size and stability of communicating groups is of course an artifact of nursery organisation and a close examination of the apparently long chains of exchanges loosely connected by relatively stable participant membership and contextual stability of activity shows that these, in fact, break down into much smaller groups of exchanges around a specific topic introduced by one or other of the participants, and usually involving exchanges between only two or three of those present at the time. Successive episodes may have different mixes of participation and different topics.

Segmentation of Dialogue Episodes

One question that had to be decided was how to chunk dialogue episodes. Did the entry of a new speaker create the initial boundary of a new episode, if in fact he picks up the thematic base of the previous interaction? Grace Shugar in her analysis of very young children learning Polish suggested that dialogue episodes were defined by three criteria, sameness of participants, of expressed topic and of reference situation. She suggested that if any one of these changed there was the beginning of a new episode interlocking by the retained features with the previous one. The difficulty in using this definition is caused by the definition of participants. One or more speakers may have previously been silent interactants within the same frame, and may make a conversational entry several turns from the beginning of the dialogue by the standard method of picking up the thematic material and making some contribution on it. It appears rigid to classify their entry as a boundary just because previously they have played a listening role. It was therefore decided in this case that a boundary would be made at the entry of a new speaker only if they had approached from outside the group, or alternatively if their contribution changed the topic of the interaction, even while remaining with the same reference frame. The skill of entering a dialogue differs from that of initiating it. It involves moves which are very like those which we all must employ in our daily lives and especially at conferences such as this one when we attempt to enter a previously established grouping. The moves are a) approach, b) hover and monitor, c) address the main participant, and in the case of children, d) either seize the theme, or make an offer such as the offer of a role. If the initial bid fails, there may be an appeal to another participant who may sponsor the aspirant. If that fails, the attempt comes to grief. Often a child who is hovering and monitoring is thought by imperceptive authority to be at a loose end and officiously whisked away to some standard form of nursery business, his problem all unsolved.

Cohesion of topic and of frame and reference

In addition to stability of participation, cohesion of function and expressed topic are given most emphasis in picking out dialogue. This focuses down on those elements of cohesion which are expressed on the surface of language in specific reference, deixis, anaphoric

pronominalisation, and also on the functional interlocking of speech acts. These dialogue episodes interlock into dialogue chains which are defined either by cohesion of participants or by cohesion of activity or latent frame. A dialogue episode is composed of at least two turns. Each turn is composed of one or more speech acts if considered in the light of function, or one or more utterances if considered in the light of form. The topics which define the dialogue episodes are, of course, largely derived from the context of activity or the latent context and it is this that gives the linking effect which gives a certain cohesion to the longer chains, but which also allows the topic to drift with a flow of new material. Thus tightly defined, dialogue episodes are very short; the mode of child dialogue episodes for three-year-olds is three turns, with a range of 2-8, and the mode for four-year-olds is four turns, with a range of 2-13. When an adult is present there are far longer exchanges because the purposes of the adult keep the dialogue within the frame. On the other hand, larger groups with an adult in charge frequently shatter into a series of two turn exchanges with weak interpersonal and topic cohesion.

The first example is a dialogue between two three-year-olds and one four-year-old boy. It is the three-year-olds that make the running, the four-year-old is a minimal participant. The episodes are bracketed by functional and topical cohesion, and there is additional bracketing for the space theme which gives an intermittent cohesion to the whole episode.

There is overall continuity of context, intermittent continuity of topic, and embedded, there are interpersonally negotiated episodes over the sharing of material, the rules about eating sand, the entry and threatened exit of a participant, and finally the unwelcome entry of Ben and the end of the space trees topic. At the level of latent context the perceptual resemblance of a funnel to a space capsule is drawn from previous experience, and brings with it the space theme, a similar perceptual resemblance to a tree brings in the planting activity and the space trees. The rules about eating sand belong to the nursery rule system, and idea that it would be excreted belongs to latent contextualising experience. Everything else in the interaction springs from the immediate ongoing activity including the verbal activity of the participants.

Example 1. Context: play at sand-tray, Fred (4.2), Gregory (3.4) and Michael (3.9) and Student Teacher nearby.

Greg holds out funnel to Mic	1	Greg-Mic	YOU HOLD THAT ONE, EH?	1	interpersonal hold by you and eh? deictic that one exophoric
Mic takes funnel rotating it as sand pours through	2	Mic	NOW ... AAAAY ... IT'S SPOUTING THE SAND RUNS OUT		it picks up that one in (1)
Repeats action. Greg imitates					
Mic swings funnel through air	3	Mic-Greg	THERE'S A SPACE ROCKET WUUUUIK	2	there exophoric to funnel also to one in (1), space theme enters
Greg tries to take rocket	4	Greg	(non verbal response)		
Mic points to another funnel	5	Mic-Greg	NO ... IT MINE. LOOK ... YOU HAVE THAT ONE		it exophoric, also coheres to that one in (1) and space rocket in (2)
Makes a sand castle and sticks funnel in, then brushes sand off jumper.	6	Greg-Mic	DON'T TOUCH IT. IT'S A SPACE TREE IT'S STICKY. LOOK. IT'S STICKING ON MY JUMPER.		it exophoric, modified space theme from Mic at (3). 2nd it exophoric to sand
Mic licks palm of hand	7	Mic-Greg	WE'LL EAT ALL THE SAND UP SHALL WE?	3	interpersonal cohesion by personal pronoun and modal shall. Sand eating theme.
Greg pretends to eat sand	8	Greg	(non verbal)		
Mic appeals to S.T.	9	Mic-ST	HE MUSTN'T DO IT MUST HE?		appeal to authority out of interpersonal frame
	10	Mic-Greg	YOU MUSTN'T REALLY		do it links with eat sand in (7) and exophorically to Greg's action (10) linked by ellipses to (9) + (7). it in (11) refers back to sand in (7)
	11	Greg-Mic	IT'LL BE A LOVELY PLOP (bowel motion)		
Mic makes castle and sticks funnel in	12	Mic-Greg	IT'S A SPACE TREE		
Fre offers another funnel, then another and picks up one that has tipped over	13	Fre-Mic	PUT IT IN THIS TIME	4	Fre enters interaction with offer and picks up activity
Mic has planted four funnels	14	Mic-all	LOOK ... THERE'S LOTS SPACE TREES		
Greg rubs eyes	15	Greg-ST	THERE'S SAND IN MY EYES	5	Gre breaks interpersonal hold, appeals out to ST
S.T.	16	S.T.	(non verbal)		
	17	Fre-Greg	I'M NOT PLAYING SPACE TREES ANY MORE	6	Fre breaks interpersonal hold
	18	Greg-Fre	OH ... PLEASE		Oh! expressive reaction, then appeal by please reference ellipted from (17)
Fre pours sand into standing funnels. Ben comes up and pushes over a space tree	19	Fre-Greg	ALL RIGHT I'LL PUT SOME SAND IN		all right concession, activity picked up, interpersonal hold restored
	20	Ben	(non verbal)	7	incursion by Ben
	21	Greg-Ben	NO DON'T BEN		No prohibitor of n.v. action + don't ellipted reference & formal address
Sweeps the whole construction	22	Greg-Ben	WELL ... IT'S CRUSHED NOW		Well marks boundary, it anaphoric to space trees
Mic protests /away	23	Mic-Ben	IT'S A SPACE TREE		it links anaphorically to it in (22) and is re-asserted as a space tree

space trees topic

At the level of surface cohesion between utterances, the first remark is addressed and tagged, its reference, that one is exophoric and ties in with the pronominal it in the second utterance. This exophoric reference also figures in remarks 5 and 6, and in remark number 6 the second it has a separate exophoric reference. In remark number 9 the tie lies between do it and eat sand in remark 7 but this reference is also exophoric to Gregory's action in non-verbal interaction number 8, and is picked up elliptically and referred out to the latent rule system about 'real' and 'pretend'. In remark number 10 there is an appeal out of the communicating set to authority. There are two uses of No! as a prohibitor (in remark number 5 and remark number 21) and in 21 it is accompanied by the formality of named address. In remark 18 there is a reaction marker Oh! referring back to Freddie's exit, and Please is used elliptically as a plea, being accepted by the concessive All right, and an offering. Remark number 22, though penultimate, contains the boundary marker Well.

In the second example the cohesion derives from the sharing of the manifest activity - hospital role play - there is both interpersonal rivalry and differences in the latent frame of reference.

The two little girls, Ann and Rebecca, show rivalry in competing for the focus of action and the topic of the verbal interchanges. Rebecca, the younger, has a domestic view of nursing, consisting of tucking up and feeding. Ann, the patient, has a more sinister picture. Nevertheless, their exchanges cohere functionally as question and answer, proposal and counter proposal. In the second group of exchanges, remarks 7 and 9, there is also cohesion between separated turns as Ann continues her remark after Rebecca's response. There are four episodes with a differing topical focus, and yet there are two threads, one of which carries Rebecca's domestic interpretation of the hospital and the second the death theme introduced from the latent frame of reference of Ann. This is repudiated vigorously by Rebecca on its first entry as a breach of frame Don't be silly, Ann, or I won't play with you, but reappears in one isolated remark in the midst of the fourth episode, showing the co-existence of complex superimposed meanings within the play transaction.

The negotiation of meaning

As the latent frame of reference is defined in the

analytic model to include what the participants bring with them into an encounter from their knowledge of the world, including the social world and its rule systems, it also includes all the discrepancies in knowledge and experience as well as what is shared. It is the main source of new information and new interpretation of the current context of action from the experience of the interacting participants. Discrepancies in meanings can be ignored or over-ridden, but they also can be argued and sorted out so that each participant gains some understanding of the distinctive meanings of the other. This requires close attention to what is said, and what is meant, and some effort to grasp not only the general intent but the differentiated features of the frame of reference of another. This close negotiation of meaning is at the heart of cultural transmission between mature adults and the immature members of their group. It is essentially a two-way process in which the inexperienced mind attempts to assimilate the meaning of the more experienced, and the more experienced probes for a foothold in the mind of the less mature. This is the supposed purpose of didactic encounters in schools, including nursery schools, and the sample considered here includes many instances, and in many of them the attempt founders from the lack of common ground upon which to negotiate. Two examples are given below; in the first the adult tries to draw the child towards her meaning; in the second the child attempts to draw the adult towards hers and attempts to sort out the difference between sand castles and sand pies.

Neither of these two attempts to negotiate across the boundaries of two latent frames of meaning are wholly successful. Terry's attempt to uphold his perception of a Victorian gas lamp first as a beer bottle and then as a boat are inadequately countered because the adult interlocutor was locked into the 'correct'frame and could not understand the difficulty of the three-year-old in bringing his limited experience to bear. The misunderstanding between Lynne and her interlocutor shows a clash between the castle frame and the pie-cooking frame. Lynne attempts to justify her definition from the rule system present in her latent reference frame about the proper distribution of cooking to mummies and castle building to little girls. The apparently bizarre transition between the first group of remarks and the second is in fact perfectly coherent, though this cohesion is made difficult to grasp by the elliptical language of Lynne who egocentrically presupposes too much common ground when she says Mummies

Example 2.

Context of activity Ann (4.7), Kim (4.11) and Reb (4.2) are in the home corner playing hospitals

	1 Ann-Reb	I WANT AN INJECTION	nursery topic	Ann introduces topic
	2 Reb-Ann	NO, I HAVE TO COVER YOU UP ... DO MY JOB ... LIE DOWN!		functional cohesion Q & A:topic rejected and alternative frame asserted,directions for action
Reb begins to tuck Ann in, Ann tries to remain sitting up, but then lies down, screws up her eyes and feigns sleep.	3 Ann-Reb	I'M GOING FAST ASLEEP AND THEN YOU WON'T BE ABLE TO KILL ME.	1	link with direction in (2) new topic from latent frame introducing death theme
Kim is sitting on the other bed looking in the bag	4 Reb-Ann	DON'T BE SILLY ANN ... ELSE I REALLY WON'T PLAY WITH YOU		frame rejected, as silly, threat of break in interpersonal hold
Reb continues tucking in				
Brief pause				
Ann turns head from Reb to Kim	5 Ann-R & K	DID YOU SEE PEYTON PLACE YESTERDAY?	Peyton Place	Ann introduces new topic, interpersonal hold by YES
Kim leaves bag and looks at other two	6 Reb-Ann	YES		Q & A, functional hold
Reb almost certainly is fibbing unless the au pair allows what parents wouldn't	7 Ann-Reb	DID YOU SEE THE BIT WHERE THE MAN SAID THE BABY WAS DYING?		the bit refers to Peyton Place in presupposition from shared experience of referents for man and baby, death topic again; Q & A,functional hold
	8 Reb-Ann	YES		
Ann widens eyes dramatically	9 Ann-Reb	AND SHE MAKE A FUNNY FACE	2	and conjoins (7) to (9), she is presupposed in latent frame
	10 Kim-Ann	EVERYTIME SOMEONE COMES SHE MAKES A FUNNY FACE. THAT WAS A GOOD PART WASN'T IT?	death theme	she coheres with she in (9) so does predicate, part refers back to (5), tag asserts interpersonal hold
Reb leans over to window in home corner screen which is beside Ann's bed	11 Reb-Ann	THE WINDOW'S OPEN AND I'LL HAVE TO CLOSE IT	window topic	(11) new topic from Reb
Ann yanks curtain open	12 Ann-Reb	BUT I WANT TO LOOK OUT	3	I in (11) is countered contrastively by I; window presupposed.
Reb yanks curtains closed and makes locking movements with right hand	13 Reb-Ann	LOCK, LOCK, LOCK - I'VE LOCKED THAT WINDOW		look links with close in (11), I is reasserted contrastively - cohesion within opposition.
	14 Ann-Reb	BUT WE'VE GOT THE KEY		key links with lock in expressed frame, interpersonal cohesion between Ann & Kim suggested by we've.

Reb flounces away in a huff throwing her remark over her shoulder, takes off nurse's cap	15	Reb-Ann	I'M NOT PLAYING WITH YOU. I'M THE COOK AND I'M GOING TO COOK THE DINNER	Reb counters the ganging up between Ann & Kim by breaking interpersonal hold by conventional signal, introduces new topic, cooking
Ann looks at Kim then Reb	16	Ann-Reb	THE NICE NURSE SAID I COULD OPEN THE WINDOW	Ann reasserts third party hold in dialogue with nice nurse, maintains window topic.
Reb returns with two plates of dinner emptied out of pot on stove	17	Reb-Ann	YOU CAN'T ... ELSE YOU'LL GET A WORSER COLD ... 'COS IT'S WINDY TODAY	Reb reasserts interpersonal hold by you and returns to window topic, elaborating from latent frame.
Reb hands plates to Kim, but Kim does not take them	18	Reb-Kim	TWO PLATES	Reb returns to cooking, utterance action embedded
Reb goes to Ann who lies back in the bed	19	Reb-Ann	SHE SAID, MY LITTLE GIRL IS DYING	sudden return to topic from (7)
Kim goes towards stove, brushing past Reb, who drops plates	20	Kim-Ann	NURSES DO GO INTO THE COOKING DON'T THEY?	Kim picks up cooking theme with assertion from latent frame tagged for cohesion
	21	Kim-Reb	OH YOU'VE SPILT THE FOOD	Interpersonal cohesion breaks into short dyadic episodes with functional cohesion interspersed with individual role play
Kim hasn't heard Reb because of talking herself	22	Kim-Reb	WHAT?	
Reb picks up a plate and fetches cup from table	23	Reb-Kim	COME ON ... I AM GETTING YOUR DINNER AND DRINK. HERE'S YOUR DINNER AND HERE'S YOUR DRINK	
Ann takes cup and dish and pretends to eat	24	Ann-Reb	I'M EATING THAT FIRST	that anaphoric to dinner in (23)
Kim has been putting pots on stove	25	Kim-Reb	THE SOUP IS ON	
Reb returns to kitchen area and begins to lay table, a knife falls, she adopts an affected voice	26	Reb-Kim	ALRIGHT	interpersonal hold by acknowledgement
	27	Reb-	GRACIOUS	role play indicated by voice change
	28	Reb-Kim	NOW THE NURSES ARE GOING TO HAVE THEIRS	theirs refers back to dinner in (23)
Picks up other dishes	29	Reb-	GOOD GRACIOUS	role play
Kim approaches Ann	30	Kim-Ann	THE NURSES HAVE TO HAVE THEIR DINNER NOW	
Reb and Kim sit down and pretend to eat				(four main exchanges with functional cohesion and cohesion of topic, 4 dyadic exchanges, continues for 18 further exchanges with 2 more topics.)

. . . . . .

3 4 5 6 7

death topic

cooking topic

Example 3.

Context : A S.T. and Ter. (3.5) are looking at a book. There is a picture of a gas lamp.

	1 S.T.	WHAT'S THAT?		that deictic referring to picture, elicitation
	2 Ter.	A BEER [bɛ:ə]		ellipsis: functional cohesion - Q & A
	3 S.T.	YOU THINK IT'S A BEAR?		interpersonal hold by you. Checks incongruity due to misheering
	4 Ter.	BEER [bi:ər]	1	article dropped, emphasis on vowel change and rolled 'r' corrects (3)
	5 S.T.	A BEER?		S.T. rechecks, article picks up (2)
	6 Ter.	YES		Affirms S.T. interpretation
	7 S.T.	YOU THINK IT'S A BOTTLE OF BEER DO YOU?		S.T. rechecks: tag indicates doubt; interpersonal hold you
Ter looks at S.T. and smiles	8 Ter.	YES		Ter reaffirms (drawled 'r' indicates doubt?)
	9 S.T.	OH, I SEE. WHAT MAKES YOU THINK IT'S A BOTTLE OF BEER? WHERE HAVE YOU SEEN A BOTTLE OF BEER?		S.T. accepts, then probes, eliciting latent frame
Ter becomes animated and looks at S.T.	10 Ter.	AT MY HOUSE. I WAKE UP AND SEE MY MUM	2	response ellipsis, functional cohesion - Q & A, elliptical reference to seen a bottle of beer and latent frame of mother drinking
	11 S.T.	HAS YOUR MUM GOT SOME BOTTLES OF BEER, THEN?		hold by your mum, and then to previous remark
	12 Ter.	MY DAD BUYS BOTTLES OF BEER		new information, beer topic held
	13 S.T.	OH, I SEE. WELL, YOU LOOK AT THE PICTURE CLOSELY. WHAT DO YOU THINK THIS IS?		S.T. accepts and directs attention, hold by you
Ter. gives cursory look	14 Ter.	A BOTTLE OF BEER	3	Ter. maintains previous response, ellipsis
S.T. lifts book and points to flame	15 S.T.	BUT WHAT ABOUT THIS PART? WHAT DOES IT LOOK LIKE TO YOU?		S.T. redirects attention, elicits this part and it cohere, interpersonal hold by to you
	16 Ter.	A BEER		Ter maintains response, abbreviates from (14)
	17 S.T.	BUT YOU'RE NOT LOOKING AT IT, TERRY. LOOK CLOSELY		S.T. rejects with but, redirects attention
Ter looks, and looks at S.T.	18 Ter.	LIKE A FIRE		Ter. changes reference, response ellipsis
	19 S.T.	YES, IT'S LIKE A FIRE, THAT'S EXACTLY WHAT IT IS, IT'S A FLAME. SO WHAT DO YOU THINK THE PICTURE IS?	4	S.T. confirms with yes and repetition, and elaboration then elicits, hold by you
Ter looks puzzled and then looks at feet raising his toes and sighing	20 Ter.	A BOAT		response ellipsis, Ter. draws on another perceptual experience
	21 S.T.	A BOAT? ARE YOU SURE?		experience response, repeated as check
	22	WELL, I THINK IT LOOKS LIKE A LAMP, A SORT OF LIGHT		S.T. asserts interpretation I think, as against Ter.'s hypothesis

disputed theme, gas lamp v. beer bottle

do . . . (make pies) but not little girls.

Both these examples show functional cohesion by the fitting together of question and answer by ellipsis and yes/no responses. Lynne,(example 4) twice using but, in (8) and (12), attempts to convey contrastive meaning.

Although neither encounter may have advanced understanding on either side very much, they do illustrate a type of dialogue including close sequential exchanges in which there is at least the possibility of bringing divergent meanings into synchrony. In a recent paper Gordon Wells (1976) contrasts this to expressive language which only gives information about states and activities and is not involved in adapting discrepant meaning systems between participants. In the pre-school sample attempts to negotiate meaning with peers are rarely sustained over more than four exchanges partially because the expressed or manifest context of activity restricts the amount of uncertainty, partially because of the difficulty of maintaining social cohesion when the frame is in dispute. Most negotiations were over toys or territory, but there were some concerning interpretation of roles, or immediate contexts.

They appear to be combining some cognitive grasp of the nature of other persons with their knowledge of the world at large in a unique synthesis which deals with the impersonal world as a feature of the consciousness of persons, or as Halliday would put it, ideationally (Halliday, 1973). The infinitely recursive and embedded nature of this combination, like the kaleidoscopic pattern produced by two inter-reflecting mirrors adds an additional dimension of complexity, and this is no doubt one reason why both linguists and psychologists have shown hesitancy in approaching it, especially in its developing stages.

In a study made six years ago Thinking about people thinking about people thinking, Miller, Kessel and Flavell (1970), who were testing children in grades one to six, found that six-year-olds could all manage a single recursion, that is that they could think about people thinking about people, so presumably they could think about people thinking about the environment and items in it as well. The problem remains of tracing the development of this representation of the activities of other minds from its earliest manifestations to the degree of maturity which appears to be logically implied by the ability of these pre-school children to

Example 4.

Context: Jeff (3.6) and Lynne (3.4) are in sand pit, filling buckets

	1	S.T.	THAT'S A NICE SANDPIE YOU'RE MAKING LYNNE!	1	sand pie topic
	2	Lynne	IT'S A SANDCASTLE	1	sand pie topic
Lynne knocks the 'castle' over	3	S.T.	OH DEAR, WHAT ARE YOU GOING TO DO NOW?	2	sand castle topic
	4	Lynne	MAKE ANOTHER ONE	2	sand castle topic
	5	S.T.	CAN YOU TELL ME HOW YOU MAKE THE SANDPIES? I'M NOT VERY GOOD AT MAKING THEM - CAN YOU TELL ME HOW?	3	sand castle topic
Lynne stops to look at S.T. and hesitates					
She insists on her own term	6	Lynne	I MAKE A - A CASTLE	1	sand castle topic
	7	S.T.	OH, A CASTLE	1	sand castle topic
Lynne stops her digging and attempts to explain	8	Lynne	MUMMIES DO, BUT NOT LITTLE GIRLS	4	sand pie topic
	9	S.T.	MUMMIES DO WHAT?	4	sand pie topic
	10	Lynne	MUMMIES DO THE COOKING, BUT NOT LITTLE GIRLS	4	sand pie topic
	11	S.T.	MUMMIES COOK THE DINNER?	4	sand pie topic
	12	Lynne	BUT NOT ... (pauses)	4	sand pie topic
	13	S.T.	NOT LITTLE GIRLS	4	sand pie topic
	14	Lynne	NO	4	sand pie topic

That is exophoric and picked up by it in (2) Functional cohesion by Q & A. S.T. asserts sandpie topic. Lynne counters with sandcastle

what ... do is picked up by make in (4) functional cohesion, Q & A one refers to sandcastle in (2)

S.T. elicits, returns to sandpies

Lynne reasserts with I, maintains sandcastle

S.T. accepts and acknowledges

Lynne makes elliptical link with sandpie theme, asserting latent frame distinguishing cooking from castle-making

S.T. ellipts question to elicit expansion of (10)

Lynne clarifies, cooking links to pies in (1) & (3)

S.T. picks up cooking topic and elaborates

Lynne reasserts distinction

S.T. picks up part, ellipts

No expressing agreement with negative statement in (13)

(4 interpersonal exchanges and 2 interlacing topics)

enter into dialogue, and beyond. Thinking about the world and thinking about people thinking about the world are representational or cognitive activities, and these young native speakers add a third operational ability, the ability to deploy action serially in time in reciprocity with the activity of others.

When the reciprocal activity is verbal dialogue, the utterances of each speaker feed back into the representational and cognitive structures in the mind of the other, recontextualising them, and changing them in the process. The behavioural manifestation of both the representational schemes and their adaptation is captured in dialogue text in an unique way, and it is therefore not surprising that it is the study of early communication that is currently throwing most light on the cognitive and operational capacities of children, though its implications are as yet not fully explored, for lack of a firm theoretical basis in developmental psychology. There are, of course, vigorous new trends in adult social psychology capable of providing insights into the ontogenesis of children's social constructs, but as yet they have found little reflection in work with children, partially owing to methodological difficulties, partially due to the reluctance of many psychologists to give full value to language as a behaviour from which inferences might be made. There has been, of course, the blocking effect of the theory of early childhood egocentrism, but there are at least two other tendencies which cloud the field. One is the identification of cognitive activity almost exclusively with the development of schemes about material objects in space rather than schemes about persons acting in time. The second is the tendency to treat the social world as a kind of extension of primary social attachment, thus concealing its cognitive and rule-following nature in a fog of affect, (Harré, 1974). There is, therefore, a vital necessity for team work between linguists and psychologists to develop jointly the intersection of their field psycholinguistics and there is every hope that this interdisciplinary co-operation will prove even more exciting in the future than it has in the past. It needs to be stressed, however, that the cross-borrowing of notions between linguists and psychologists on an ad hoc basis is not enough. There is great need for sustained theoretical dialogue between the two disciplines if the problems posed by dialogue at any stage of human life are to be solved.

References

Bates, E., Camaioni, L. and Volterra, V. (1975). The acquisition of performatives prior to speech, Merrill-Palmer Quarterly 21-23. 205-226.

Bowerman, M. (1973). Early Syntactic Development A cross linguistic study with special reference to Finnish. Cambridge: CUP. pp 69-72.

Bruner, J. (1975). The Ontogenesis of Speech Acts. Journal of Child Language Vol. 2. No. 1. 1-19.

Bruner, J. (forthcoming). Language and Experience. In R. S. Peters (Ed.) John Dewey Reconsidered London: RKP.

Clark, R. (forthcoming). What's the use of imitation? Journal of Child Language.

Halliday, M. A. K. (1975). Explorations in the functions of Language. London: Arnold.

Harré, R. (1974). The conditions for a social psychology of childhood. In Martin Richards (Ed.) The integration of a child into a social world.

Heider, F. (1958). The Psychology of Interpersonal Relations. New York: Wiley.

Keenan, E. (1975). Again and again, the Pragmatics of Repetition in Child Language. Unpublished paper circulated by Gazdar, G. & Levinson, S. (Eds.) Pragmatics Microfiche. Dept. of Linguistics, University of Cambridge.

Malinowski, B. (1923). The problem of meaning in primitive languages. Supplement 1 in Ogden & Richards The Meaning of Meaning. London: RKP.

McTear, M. F. (1976). Repetition in child language. This volume.

Mueller, M. and Lucas, T. (1975). Peer interaction among toddlers.In Lewis, M. & Rosenblum, L. A. (Eds) Friendship and Peer Relations. New York: Wiley. pp 223-257.

Piaget, J. (1959). The Language and Thought of the Child. Third edition. London: Routledge.

Ryan, J. (1973). Interpretation and imitation in early language development.In Hinde, R. and Hinde, J. S. (Eds.) Constraints on Learning: Limitations and Predispositions. London: Academic Press.

Schatz, M. (1975). The comprehension of Indirect Directives. Can Two-year-olds shut the Door? In Gazdar, G. & Levinson, S. Pragmatics Microfiche. Dept. of Linguistics, University of Cambridge.

Shugar, G. (1975). Child's Intent: Relation of Function to Realisation During the First Year of Speaking. Paper delivered at the AILA

World Congress. Stuttgart. 1st August 1975.

Shugar, G. (1975). Behaviour stream organisation of the young child acquiring language. For the 3rd Biennial Conference of the International Society for the Study of Behavioural Development, 1975. Guildford, England.

Sinclair, J. McH. and Coulthard, R. M. (1975). Towards an Analysis of Discourse. The English used by Teachers and Pupils. London: OUP.

Snow, C. (1975). The Development of Conversation between Mothers and Babies. Unpublished paper circulated in Gazdar, G. & Levinson, S. (Eds.) Pragmatics Microfiche. Dept. of Linguistics, University of Cambridge.

Taguiri, R. and Petrullo, L. (1958). Person Perception and Interpersonal Behaviour. Stanford University Press. California.

Trevarthen, C. (1975). Conversations with a two month old. Early attempts at Speech. In Roger Lewin (Ed.) Child Alive. London: Temple Smith.

Wells, G. (1976). Describing Children's Linguistic Development. Unpublished paper given at SSRC Conference on Collecting, Using and Reporting Talk for Research in Education. Reading. March 1976.